

with a row of horizontal scales on the shoulder, and four heavy spiral ridges below the shoulder on the body whorl. There are fine spiral ridges on all the whorls. Aperture of a greenish white, canal short. It differs from *C. hindsii* Carpenter, in having the shoulders nearly straight, and only a faint trace of scales where the body-whorl joins the next one. The shoulders in *C. hindsii* are very sloping. Length of adult shell 47 mm.

Type in Stanford University Collection No. 411. Type locality: Bird Rock off Isthmus, Catalina Island. Range: known only from type locality, and one small specimen from Galapagos Islands (fig. 4).

Named in honor of T. S. Oldroyd who collected it some 34 years ago. It has gone under the name of *Coralliophila hindsii* Carpenter. Carpenter's type was about 17 mm. in length.

A NEW SNAIL FROM CATALINA ISLAND, CALIFORNIA

BY T. D. A. COCKERELL

On the grassy slope above Avalon, Catalina Island, several years ago I collected nine specimens of an elegant little snail of the genus *Micrarionta*. On returning home I found similar examples in the University of Colorado Museum, labelled *Epiphragmophora catalinae* Dall (Proc. Phila. Acad., 1900, p. 103.). However, on looking up the literature, it became evident that the real *Micrarionta catalinae* (Dall) was a different shell, of which we fortunately possessed a specimen, collected by Mrs. M. G. Odell at the Isthmus, Catalina Island. My snail may therefore be called:

Micrarionta beatula n. sp.

Diameter, max. 9.6, min. 8, alt. 5.5 mm.; diameter of aperture 4 mm.; depressed subglobose, with $5\frac{1}{4}$ whorls; reddish horn color, rather dull with peripheral brown band broadly bordered on each side with whitish; surface with

fine indistinct revolving striae; spire very obtuse; umbilicus entirely covered by the reflexed peristome; peristome white, extremely heavy, strongly reflexed. Type A. N. S. Phila.

M. catalinae (Dall) is much larger, with much wider aperture, peristome not so heavy in proportion to size of shell, umbilicus exposed. Apparently nearer to *M. ruficincta* (Newc.) than to *M. beatula*.

M. gabbi (Newc.), from Santa Barbara I., is larger and more globose with reddened peristome.

MUSSEL POISONING IN CALIFORNIA

BY K. F. MEYER

(From *California Fish and Game*, Vol. 14, July 1928)

During the month of July, 1927, 102 people were seriously poisoned and 6 died following the consumption of the large mussel *Mytilus californianus* Conrad, which had been freshly gathered at 14 different beds on the open shore line of the Pacific coast in the vicinity of San Francisco (see text, figure 1). Although the origin of the poison is not definitely established since the investigations are still in progress it is known that (1) the toxic properties of the mollusks are due to a poison, probably a quaternary amine, which is heat stable in acid solutions and which causes motor nerve paralysis. The concentration of the poison as determined by laboratory test may vary in different mussels and different beds. (2) the poison is not formed by bacteria nor due to copper salts from the rocks nor due to the little crab, *Pinnotheres pisum*, which lives in the mantle cavity nor is it induced by parasites such as sponges and starfish. (3) The poisonous mussels were neither located in stagnant and polluted basins nor exposed to the sun for long periods at low tide, but they were subjected to the ebb and flow of the tides; the poison is therefore not due to asphyxiation or post-mortem changes. (4) It is prob-